Mr. Syed Quadri Remedial Project Manager U.S. Environmental Protection Agency 77 West Jackson Boulevard, SR-6J Chicago, Illinois 60604

Contract No.: EP-S5-06-04 TDD No.: S05-0008-0808-008

Document Control No.: 506-2E-ADEP

Re: Sampling and Analysis Plan, Revision 1

For the Lusher Street Groundwater Contamination Site, Elkhart, Indiana

Dear Mr. Quadri:

Weston Solutions, Inc., (WESTON®) is pleased to submit four copies of the Sampling and Analysis Plan, Revision 1, for the Lusher Street Groundwater Contamination Site, Elkhart, Indiana. The SAP was revised to address U.S. EPA's comments. The responses to the U.S. EPA's comment are provided below.

1. <u>Section 3.2</u>—this discussion would be immensely easier to follow if a figure was developed (and referenced) showing the primary sampling results (say TCE and TCA) for each of the wells and the important locations referenced in the text—such as the highly contaminated well on Avalon.

WESTON has included Figure 3 and Figure 4 showing TCE, PCE and TCA results.

- 2. Judgement call, but do we really need the discussion of the Gemeinhardt facility and associated investigation presented in this section?
  - The U.S. EPA requested WESTON to include the Gemeinhardt facility in this investigation; therefore, the discussion of this facility has been included in this section.
- 3. Section 3.3—picky point, but I don't think we need to be told that a given facility is located in Elkhart, Indiana. That fact is obvious.
  - References to Elkhart, Indiana have been removed from this section.
- 4. Another picky point, but while most of this discussion is very useful, some of the information presented in the subsections seems extraneous. For example, do we

need to know the breakdown of where Colbert Packaging sends its boxes? Do we need the commercials presented in sections 3.3.11 and 3.3.19?

Sections 3.3.11 and 3.3.19 have been revised.

4. These locations should be referenced to the figures, at least at the start of the section. Again, it makes the discussion easier to follow.

An introductory paragraph has been added to Section 3.3 with a reference to Figure 2. Each of the properties can be identified by the address listed.

5. Section 3.3.20—it's my understanding EPA and IDEM agree this facility is not the source of the Lusher Ave. plume. If that is correct, why are we discussing this site? It's a red herring. IF EPA and IDEM are not in agreement that this facility isn't the source of the Lusher contamination, additional study of this facility-and its plume-needs to be done.

The Gemeinhardt facility has been included in this SAP at the request of the U.S. EPA. No edits to this section have been made.

6. **Section 3.4**—mention the specific VOCs that are COCs.

Edits have been made to list the chlorinated solvents identified in the first paragraph of Section 3.2.

7. **Section 4**—when you say soil samples are going to be collected, do you mean continuous samples fro lithologic logging or samples from pre-selected depths for chemical analysis? Or both? Provide some small but adequate detail on the soil sampling effort.

This section's bullets have been revised to indicate continuous sampling for lithologic logging, and one sentence was added to indicate soil samples are to be collected from each 5-foot depth interval.

8. Consider if you really need daily shipping of samples. Every second day (TU, TH, F) may be adequate, and might save some money.

This paragraph was edited to reflect either daily or every other day shipping.

9. Section 5.1—as written, I doubt this investigation can meet any of these objectives, with the exception of the first. I'm also not sure it needs to. Consider revising the objectives to something like identifying potential sources of the plume and determining which sites, if any, require additional investigation.

The second and third objectives have been edited to indicate data is "to be gathered" to help support the listed decisions.

10. **Section 6.0**—assuming soil samples will be sent for lab analysis, identify depths where soil samples will be collected or criteria for collection at least once at the start of this section or earlier in the document.

A reference has been made pointing the reader to Sections 6.1 for the sampling procedures.

11. Section 6.0.20—given the level of data collection in and around this property, is there much value to collecting new data here? It would seem more cost-effective to use the fairly abundant historical information to determine the status of this site rather than utilize fairly scarce resources on a minor current effort.

As indicated above, the U.S. EPA requested this site be evaluated. No edits have been made to this section.

12. Section 6.2—parts of this text are redundant. Say something once an be done with it.

To reduce redundancy "(Geoprobe or equivalent)" has been removed from the section title.

13. **Section 6.2.1**—how will the depth to water be determined at each boring location?

The following sentence has been added to the end of the third bullet, "The depth of the groundwater table will be inferred based on saturated conditions encountered in the soil samples."

- 14. I see very little value to submitting a soil sample for every 5-foot interval at each boring. I'd recommend 1-2 soil samples per boring with some room for more if conditions required. I'd suggest the sample interval be based on PID results and visual and olfactory observation by the field geologist, per the work plan. The money saved on the soil samples would be better applied to additional characterization of ground water pending the sampling results—additional locations or deeper sampling.
  - U.S. EPA RPM has agreed with this approach therefore, no edits have been made to the sampling approach.
- 15. Suggest sample collection proceed after three well volumes have been removed from the well, not 2 minutes of purging.

Revisions were made to reflect a three well-volume purge.

16. Suggest field parameters be collected on the purge water.

Revisions were made to indicate field parameters will be collected.

17. What's the difference between the first two sentences in the last bullet?

The second sentence has been deleted.

- 18. Remove stuff that pertains to the details of the soil and water sampling from this section. It belongs in section 6.3.2 and 6.2.3. Some of the particulars here also seem to contradict what's in section 6.2.3 (purging stuff).
  - Sections 6.2.1 through 6.2.3 have been revised to reduce redundancy and to place procedure into the appropriate sections.
- 19. Section 6.2.3—getting a total depth measurement prior to sample collection could volatilize the samples and bias the VOC results low. If total depth is measured, and I'd recommend it be measured to verify extension of the screen, it's very important to the results to ensure at least three well volumes are purged before sample collection. Text should also specify tape will be lowered and raised gently to minimize VOC loss from the sample.

Language has been added to indicate the sounding device will be slowly lowered and raised through the water column.

20. **Section 6.2.4**—specify the pump in take will be placed within the saturated part of the well screen.

Language has been added to indicate "the pump intake will be located within the screened interval, or several feet from the bottom of the monitoring well if construction details are unavailable."

21. **Section 7.1**—whose SOPs are these? Where can they be obtained? Have they been approved by USEPA?

The SOPs are WESTON START SOPs. \

22. **General Comment**—are there any residential supply wells remaining in the site area? If there are, consider collecting samples from them.

The locations of existing residential wells are not known. If wells are identified by U.S. EPA or IDEM, WESTON will water samples from residential wells. No revisions to SAP has been made.

Should you have any questions or require additional information, please feel free to contact me at (847) 918-4051.

Weston Solutions, Inc.

Omprakash S. Patel. Site Manager